

1 APPLICATION FOR UNITED STATES LETTERS PATENT

2 ON INVENTION FOR:

3 THERMOGLUE BINDING TAPE TO PROTECT AND DECORATE CARPET'S
4 EDGES AND BORDERS WITH A FUSE SYSTEM

5 BY INVENTOR: Benigno G. Perez

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7 Agt. Doc. No.: PERB27X

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15 TO ALL WHOM IT MAY CONCERN:

16 BE IT KNOWN that I, Benigno G. Perez, a citizen of
17 THE UNITED STATES OF AMERICA and resident of: Bronx, NY
18 10469 have invented certain new and useful improvements in
19 a(n): THERMOGLUE BINDING TAPE TO PROTECT AND DECORATE
20 CARPET'S EDGES AND BORDERS WITH A FUSE SYSTEM of which the
21 following is a full, clear, concise and exact description:

1 Inventor: Benigno G. Perez
2 Invention: THERMOGLUE BINDING TAPE TO PROTECT AND DECORATE CARPET'S
3 EDGES AND BORDERS WITH A FUSE SYSTEM
4 DOC. No.: PERB27X

5 CROSS REFERENCE TO RELATED APPLICATIONS

6 The instant application is a continuation of U.S. application
7 serial number 10/646,947, filed on 08/22/2003, and entitled PROTECTIVE
8 CARPET BINDING, which claimed the priority of Republic of Peru
9 application document number 000823-2002/OIN 000001, filed August 27,
10 2002.

11 BACKGROUND OF THE INVENTION

12 Field of the Invention:

13 The present invention relates to a binding. More particularly, the
14 present invention relates to a thermoglue binding tape to protect and
15 decorate carpet's edges and borders with a fuse system.

16 Description of the Prior Art:

17 Numerous innovations for finishing strips have been provided in the
18 prior art that will be described. Even though these innovations may be
19 suitable for the specific individual purposes to which they address,
20 however, they differ from the present invention.

21 A FIRST EXAMPLE, U.S. Patent No. 1,423,143 to Patterson teaches a
22 strip for holding the edges of floor covering, a strip having a thin flap
23 on the top of one edge, and a downwardly and inwardly inclined face on the
24 other edge.

25 A SECOND EXAMPLE, U.S. Patent No. 4,054,698 to Hamrah teaches carpet
26 binding tape for providing the edge portion of floor covering with a

1 uniform edge and including a body of adhesive material for adhesively
2 securing the edge molding to the edge portion of the floor covering. The
3 carpet binding tape prevents unraveling and fraying of the carpet and may
4 be of flexible material thereby permitting the carpet to be rolled up
5 without removal of the carpet binding tape.

6 A THIRD EXAMPLE, U.S. Patent No. 4,483,896 to Gray et al. teaches
7 a carpet seaming apparatus that includes an elongated bonding tape having
8 an electrical resistance circuit with contacts at the edge of the tape
9 mounted on the face thereof with a hot melt adhesive in the form of
10 elongated beads running the length of the tape that melts in response to
11 electrical current in the resistive conductors. A tool having spaced
12 apart electrical contacts for engaging the contacts adjacent the edges of
13 the tape inducing an electrical current therein for heating and melting
14 the hot melt adhesive.

15 A FOURTH EXAMPLE, U.S. Patent No. 5,018,235 to Stamatiou et al.
16 teaches a holder for flexible material, for example a disposable floor
17 mat, that comprises a base on which the material rests, at least part of
18 the base having an integral wall so arranged as to form a recess. The
19 recess is dimensioned so as to receive the material in a close fit and
20 means are provided to hold the material in place. The holding means may
21 comprise a lip integral with the wall of the holder which extends above
22 the recess and means may be provided on the surface of the holder to act
23 as a guide for the correct placement of the material. Additionally or
24 alternatively the base of the holder may include holding means such as
25 "Klettostop", which comprises a plurality of upwardly extending hooks or
26 spikes formed from a plastic material. Means may also be provided for
27 retaining the holder on a support surface.

28 A FIFTH EXAMPLE, U.S. Patent No. 5,045,374 to Tucker teaches a stiff
29 plastic strip that is formed to provide reinforcement for longitudinal
30 edges at which interior drywall surfaces meet and for capping corners
31 formed of sheets of wallboard meeting at orthogonal angles. A pair of
32 laterally directed flanges extend in diverging fashion from a central

1 transversely curved region of the plastic strip. A contact sensitive
2 adhesive strip is mounted on each of the flanges to extend longitudinally
3 therealong so as to allow the plastic strip to be pressed against drywall
4 or wallboard surfaces. One of the flanges of the plastic strip may be
5 slit periodically throughout its length to allow it conform to arches and
6 circular openings. In another embodiment a stiff, water impervious
7 plastic sheet with three flanges extending outwardly therefrom has contact
8 sensitive adhesive layers disposed on each of the flanges. The structure
9 can thereby serve as a cap for protruding soffit corners.

10 A SIXTH EXAMPLE, U.S. Patent No. Des. 394,776 to Callas teaches the
11 ornamental design for a floor mat border.

12 A SEVENTH EXAMPLE, U.S. Patent No. 5,766,726 to Bannister teaches
13 a resilient, semi-rigid molding strip for installation along an edge of
14 an linoleum floor surface, particularly suited to installations where the
15 edge follows a curved contour. The molding strip is formed from extruded
16 semi-rigid vinyl. There is a horizontal top flange and a vertical web
17 having an angled nailing surface along its lower edge. The nailing
18 surface correctly aligns the fasteners, and the web section is drawn
19 downwardly during installation so that the top flange is resiliently
20 biased against the linoleum surface. The characteristics of the semi-
21 rigid material permit the strip to be bent in the horizontal plane without
22 buckling the top flange or footing section of the web.

23 AN EIGHTH EXAMPLE, U.S. Patent No. 6,517,922 B2 to Ang, et al.
24 teaches a kit for use in finishing a cut edge of floor coverings such as
25 mats, carpets, carpet runners, and roll runners having a cut side edge
26 including an elongated edging strip which has a length equal to or
27 exceeding the length of the cut edge to be finished. The lateral width
28 of the edging strip is selected so that when secured in place, the strip
29 substantially covers and conceals the cut edge. The edging strip includes
30 a flexible ribbon and an attachment member provided to permanently secure
31 the ribbon in position substantially overlapping the cut edge.
32 Preferably, the attachment member comprises a piece of two-sided tape

1 having a length and width generally corresponding to that of the finishing
2 strip. The two-sided tape is secured along a first side to the finishing
3 strip, and a release sheet is carried by and releasably secured to the
4 second other side of the tape. In use, the release sheet is removed to
5 activate the adhesive tape, whereupon the second side of the tape is
6 pressed into contact with the floor covering to secure the finishing strip
7 or ribbon in place.

8 It is apparent that numerous innovations for finishing strips have
9 been provided in the prior art that are adapted to be used. Furthermore,
10 even though these innovations may be suitable for the specific individual
11 purposes to which they address, however, they would not be suitable for
12 the purposes of the present invention as heretofore described.

1

SUMMARY OF THE INVENTION

2 ACCORDINGLY, AN OBJECT of the present invention is to provide a
3 thermoglue binding tape to protect and decorate carpet's edges and borders
4 with a fuse system that avoids the disadvantages of the prior art.

5 ANOTHER OBJECT of the present invention is to provide a thermoglue
6 binding tape to protect and decorate carpet's edges and borders with a
7 fuse system that is simple to use.

8 BRIEFLY STATED, STILL ANOTHER OBJECT of the present invention is to
9 provide a thermoglue binding tape to protect and decorate carpet's edges
10 and borders with a fuse system. An adhesive is disposed at strategic
11 locations on a tape. In one embodiment, the adhesive completely covers
12 one surface of the tape and the tape is bent into a channel shape that
13 adhesively captures the unfinished edge of the carpet. In another
14 embodiment, one strip of adhesive extends along one surface of the tape
15 adjacent one edge thereof, another strip of adhesive extends along the
16 other surface of the tape adjacent the other edge thereof, and the tape
17 is bent into a channel shape that adhesively captures the unfinished edge
18 of the carpet, with a terminating portion of the tape bent under itself.
19 In still another embodiment, one strip of adhesive completely covers one
20 surface of the tape and another strip of adhesive extends along the other
21 surface thereof adjacent one edge thereof. Welting is adhered along the
22 one surface of the tape, which wraps therearound and is adhered thereto
23 with a flange extending free therefrom that underlying adheres to the
24 unfinished edge of the carpet.

25 The novel features which are considered characteristic of the
26 present invention are set forth in the appended claims. The invention
27 itself, however, both as to its construction and its method of operation,
28 together with additional objects and advantages thereof, will be best
29 understood from the following description of the specific embodiments when
30 read and understood in connection with the accompanying drawing.

1

BRIEF DESCRIPTION OF THE DRAWING

2 The figures of the drawing are briefly described as follows:

3 FIGURE 1 is a diagrammatic perspective view of the present invention
4 in use;

5 FIGURE 2 is an enlarged diagrammatic cross sectional view taken along
6 LINE 2-2 in FIGURE 1 of a first embodiment of the present
7 invention in use;

8 FIGURE 3 is a diagrammatic perspective view of the first embodiment of
9 the present invention, per se;

10 FIGURE 4 is an enlarged diagrammatic cross sectional view taken along
11 LINE 4-4 in FIGURE 1 of a second embodiment of the present
12 invention in use;

13 FIGURE 5 is a diagrammatic perspective view of the second embodiment
14 of the present invention, per se;

15 FIGURE 6 is an enlarged diagrammatic cross sectional view taken along
16 LINE 6-6 in FIGURE 1 of a third embodiment of the present
17 invention in use; and

18 FIGURE 7 is a diagrammatic perspective view of the third embodiment of
19 the present invention, per se.

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LIST OF REFERENCE NUMERALS UTILIZED IN THE DRAWING

- 2 10 binding of present invention for protecting unfinished edge 12 of
3 carpet 14.
4 12 unfinished edge 12 of carpet 14
5 14 carpet
6 16 floor-abutting surface of unfinished edge 12 of carpet 14
7 18 ambient-facing surface of unfinished edge 12 of carpet 14
8 20 tape
9 22 adhesive for adhering tape 20 to unfinished edge 12 of carpet 14
10 24 pair of opposing surfaces of tape 20
11 26 pair of opposing edges defining pair of opposing surfaces of tape
12 20

13

First Embodiment

- 14 110 binding
15 120 tape for capturing unfinished edge 12 of carpet 14 (Figs 2 & 3)
16 122 adhesive
17 124 pair of opposing surfaces of tape 120

18

Second Embodiment

- 19 210 binding
20 220 tape for capturing unfinished edge 12 of carpet 14, (Figs 4 & 5)
21 222 adhesive
22 224 pair of opposing surfaces of tape 220
23 226 pair of opposing edges of tape 220
24 228 pair of adhesive strips of adhesive 222

1

Third Embodiment

- 2 310 binding
- 3 320 tape (Figs 6 & 7)
- 4 322 adhesive
- 5 324 pair of opposing surfaces of tape 320
- 6 326 pair of opposing edges of tape 320
- 7 328 pair of adhesive strips of adhesive 322
- 8 330 welting
- 9 331 paper rope of welting 330
- 10 332 originating portion of tape 320
- 11 334 terminating portion of tape 320
- 12 336 flange of tape 320

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DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

2 Referring now to the figures, in which like numerals indicate like
3 parts, and particularly to FIGURE 1, the binding of the present invention
4 is shown generally at 10 for protecting an unfinished edge 12 of a carpet
5 14. The unfinished edge 12 of the carpet 14 has a floor-abutting surface
6 16 and an ambient-facing surface 18. The ambient-facing surface 18 of the
7 unfinished edge 12 of the carpet 14 opposes the floor-abutting surface 16
8 of the unfinished edge 12 of the carpet 14.

9 The binding 10 comprises a tape 20 and an adhesive 22. The tape 20
10 has a pair of opposing surfaces 24 defined by a pair of opposing edges 26.
11 The adhesive 22 is disposed on the tape 20, and is for adhering the tape
12 20 to the unfinished edge 12 of the carpet 14.

13 The configuration of a first embodiment of the binding 110 can best
14 be seen in FIGURES 2 and 3, and as such, will be discussed with reference
15 thereto.

16 The adhesive 122 completely covers one surface of the pair of
17 opposing surfaces 124 of the tape 120. The tape 120 is bent into a
18 channel shape for capturing the unfinished edge 12 of the carpet 14 by
19 having the one surface of the pair of opposing surfaces 124 of the tape
20 120 originate against the floor-abutting surface 16 of the unfinished edge
21 12 of the carpet 14, bend up over the unfinished edge 12 of the carpet 14,
22 and terminate against the ambient-facing surface 18 of the unfinished edge
23 12 of the carpet 14 so as to allow the adhesive 122 to abut the unfinished
24 edge 12 of the carpet 14 completely and adhere the tape 120 to the
25 unfinished edge 12 of the carpet 14 when the tape 120 is heated by a
26 special iron design precisely for this purpose, which melts the adhesive
27 122, and which is the subject matter of another application.

28 The configuration of a second embodiment of the binding 210 can best
29 be seen in FIGURES 4 and 5, and as such, will be discussed with reference
30 thereto.

1 The adhesive 222 is a pair of adhesive strips 228. One strip of the
2 pair of adhesive strips 228 of the adhesive 222 extends along one surface
3 of the pair of opposing surfaces 224 of the tape 220, adjacent one edge
4 of the pair of opposing edges 226 of the tape 220. The other strip of the
5 pair of adhesive strips 228 of the adhesive 222 extends along the other
6 surface of the pair of opposing surfaces 224 of the tape 220, adjacent the
7 other edge of the pair of opposing edges 226 of the tape 220.

8 The tape 220 is bent into a channel shape for capturing the
9 unfinished edge 12 of the carpet 14 by having the one surface of the pair
10 of opposing surfaces 224 of the tape 220 originate against the floor-
11 abutting surface 16 of the unfinished edge 12 of the carpet 14, bend up
12 over the unfinished edge 12 of the carpet 14, bend back under itself so
13 as to allow the other surface of the pair of opposing surfaces 224 of the
14 tape 220 to terminate against the ambient-facing surface 18 of the
15 unfinished edge 12 of the carpet 14 so as to allow the one strip of the
16 pair of adhesive strips 228 of the adhesive 222 to abut the floor-abutting
17 surface 16 of the unfinished edge 12 of the carpet 14 and the other strip
18 of the pair of adhesive strips 228 of the adhesive 222 to abut the
19 ambient-facing surface 18 of the unfinished edge 12 of the carpet 14 and
20 adhere the tape 220 to the unfinished edge 12 of the carpet 14 when the
21 tape 220 is heated by the iron tool.

22 The configuration of a third embodiment of the binding 310 can best
23 be seen in FIGURES 6 and 7, and as such, will be discussed with reference
24 thereto.

25 The adhesive 322 is a pair of adhesive strips 328. One strip of the
26 pair of adhesive strips 328 of the adhesive 322 completely covers one
27 surface of the pair of opposing surfaces 324 of the tape 320.

28 The other strip of the pair of adhesive strips 328 of the adhesive
29 322 extends along the other surface of the pair of opposing surfaces 324
30 of the tape 320, adjacent one edge of the pair of opposing edges 326 of
31 the tape 320.

1 The binding 310 further comprises welting 330. The welting 330 is
2 a paper rope 331.

3 The welting 330 extends along the one surface of the pair of
4 opposing surfaces 324 of the tape 320, substantially midway between the
5 pair of opposing edges 326 of the tape 320, and is adhered thereto by the
6 one strip of the pair of adhesive strips 328 of the adhesive 322 on the
7 one surface of the pair of opposing surfaces 324 of the tape 320.

8 The tape 320 wraps around, and adheres to, the welting 330, with an
9 originating portion 332 of the tape 320 and a terminating portion 334 of
10 the tape 320 extending free of the welting 330.

11 The terminating portion 334 of the tape 320 overlies the originating
12 portion 332 of the tape 320, and is adhered thereto by virtue of the one
13 strip of the pair of adhesive strips 328 of the adhesive 322 on the one
14 surface of the pair of opposing surfaces 324 of the tape 320 so as to form
15 a flange 336.

16 The flange 336 of the tape 320 has the other strip of the pair of adhesive
17 strips 328 of the adhesive 322 thereon by virtue of the terminating
18 portion 334 of the tape 320 having the other surface of the pair of
19 opposing surfaces 324 of the tape 320 exposed thereon. Flange 336 is
20 impregnated with an edge sealing adhesive, typically FAST LOCK (R)
21 manufacture by Orcon Corp. 1570 Atlantic street, Union city, ca 94587-
22 3299. This makes the surface of tape 320 less porous so that adhesive
23 does not penetrate through the material when it is applied to the carpet
24 edge. It is further understood as a practical matter that the tape 320
25 may be manufactured with or without adhesive 328.

26 The unfinished edge 12 of the floor-facing surface 16 of the carpet
27 14 overlyingly abuts the flange 336 of the tape 320 and is adhered thereto
28 by the other strip of the pair of adhesive strips 328 of the adhesive 322
29 when the tape 320 is heated by the iron tool.

30 It will be understood that each of the elements described above, or
31 two or more together, may also find a useful application in other types
32 of constructions differing from the types described above.

1 While the invention has been illustrated and described as embodied
2 in a thermoglue binding tape to protect and decorate carpet's edges and
3 borders with a fuse system, however, it is not limited to the details
4 shown, since it will be understood that various omissions, modifications,
5 substitutions and changes in the forms and details of the device
6 illustrated and its operation can be made by those skilled in the art
7 without departing in any way from the spirit of the present invention.

8 Without further analysis, the foregoing will so fully reveal the
9 gist of the present invention that others can, by applying current
10 knowledge, readily adapt it for various applications without omitting
11 features that, from the standpoint of prior art, fairly constitute
12 characteristics of the generic or specific aspects of this invention.